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Author name: Yung-Fang Chen

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Kobe Earthquake (Hanshin/Awaji Earthquake)

Kobe Earthquake took place at 5:46 on the morning of 17th January 1995. The intensity of the earthquake was measured at 7.2 on the Richter scale and lasted for about 20 seconds. The epicentre of the earthquake was located under the Awajishima Island off the coast of Kobe. The earthquake hit 10 major cities and 10 substantial towns in Hyogo Prefecture which resulted in about 6,434 deaths and more than 31 million injured. One of the reasons that the earthquake claimed as many lives was due to the fires caused by the earthquake in old residential areas where most of the buildings were constructed from wood and they caught fire very quickly. These buildings had been constructed before the introduction of designs to help withstand earthquakes. These fires claimed most of the deaths and contributed greater damage of the earthquake.

Although many modern buildings in Kobe were built to withstand earthquakes, the earthquake caused extensive damage to critical infrastructure, including the Hanshin expressway, Kobe port, main roads, electricity supply systems, the water mains networks, and telecommunication system. According to the Report on the Lessons Learned from the Kobe Earthquake published by the Cabinet Office, Government of Japan, more than 520,000 private residential buildings collapsed and 15% of public buildings were seriously damaged. As a result, more than 310,000 residents were forced to stay in temporary shelters such as schools, community centres, parks and other public facilities in 15 cities and towns.

The destruction of main roads and utilities made it impossible for fire fighters to reach fires started by broken gas lines. The damage caused by the earthquake suggested that there was a need to revise the standards for seismic design of highway bridges and buildings. Of the 13 major earthquakes in Japan since 1900, Kobe earthquake produced the second largest death toll. It also led to more than \$100bn economic losses.

An emergency disaster relief centre based in the National Land Agency was established soon after the earthquake took place to coordinate agencies such as the fire, police and coast guard implementing search and rescue and collecting information and data about the damage caused by the earthquake. The Cabinet disaster relief headquarters led by the Prime Minister Tomiichi Murayama was also established later to coordinate the response to the earthquake, strategies included food and water supply, temporary housing, paramedics and medical equipment support, and establish medical centres and critical infrastructure rehabilitation. However, conflicts between local authorities and the national government paralyse much of the response and relief activities (Ozerdem and Jacoby 2005).

The national government of Japan was also criticised for not responding quickly and effectively, partly it was caused by poor interaction between civil and military authorities. 170 Self-Defence Forces (SDF) were dispatched four hours after the earthquake took place. Apart from 7000 people rescued by the emergency service and SDF, most of the victims were rescued by the residents at local areas.

The emergency service proved to be unable to respond to such a large scale catastrophe, for example, there was no coordination between local hospitals and medical teams during the first few days after the earthquake.

Failing to respond to the disaster effectively also resulted in the intervention by a gangster organisation - Yamaguci-gumi. The organisation quickly used scooters, boats and helicopters to transport and distribute food and supplies to the residents (Lerbinger 1997).

Another criticism towards Japanese Government was in not accepting international aid immediately after the earthquake. The language barriers and the lack of medical licensing prevented aid and medical support from countries offering it in the first instance although eventually Japanese government accepted various aids from 72 countries.

The voluntary activities in the post disaster relief phase provided the basis for the emergence of civil organisations in Japan. There were about 1.5 million individuals who participated in the post disaster relief activities. Nishi Suma Community Building and Planning Assembly established in October 1995 played a centralised response centre at the local level (Ozerdem and Jacoby 2005). One of the lessons learnt was to increase the capability of volunteers regarding relevant skills in the reconstruction process.

Bibliography (further readings)

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See also: Asia, East, Earthquakes, Japan, Rejection of International Aid

Dr Yung-Fang Chen, Department of Geography, Environment and Disaster Management, Coventry University, UK

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